

(*acanthocarpa*); *Veronica Anagallis-aquatica* f. *anagalliformis* (*anagallidiformis*).

As it presently stands, Art. 73 is a rather mild attempt at spelling-standardization. Yet botanists seem pretty lackadaisical about its observance. Under the circumstances it hardly seems worth while to propose still further spelling-standardizations. Yet I would strongly support an Article 73 that would eliminate such variants as *caeruleus*, *ceruleus* and *coeruleus*; *littoralis* and *litoralis*; *alleggheniensis* and *allegghaniensis*; *pensylvanicus*, *pennsylvanicus* and *pensilvanicus*, and most of all, the multitude of alternate forms of *kamtschaticus* and *alaskensis*. The latter are especially vexing.

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### ANOTHER TRIBULUS ADVENTIVE IN THE NEW WORLD

*Tribulus* L. (Zygophyllaceae) is an Old World genus of perhaps several dozen species, two of which are well-known adventives in the Americas. *Tribulus cistoides* L. is a common weed in tropical Mexico and the Carribean region, and *T. terrestris* L. a ubiquitous pest in the warm temperate areas of both North and South America. While examining specimens of this genus from South America, I discovered a third adventive, *T. alatus* Del., represented by the following collections from western Peru:

DEPT. PIURA: Pariñas Valley, *Haught F-143* (F), 206 (GH); Talara, *Johnston 3513* (F, GH); 1 km W Talara, *Beetle 26201* (UC). DEPT. ICA: between Cocharcas and Quilque, *Ferreyra 580* (US). Information on the labels of the Beetle and Johnston collections indicate that the plant was not common where found, but *Haught F-143* states that the plant was "abundant after rains, especially north of Pariñas Valley."

This desert-dwelling annual from North Africa and the Middle East to India is easily recognized by its winged

mericarps. Vegetatively, *Tribulus alatus* is similar to more pubescent examples of *T. terrestris*, which also is found in Peru. The three New World adventives may be separated readily by the following key:

1. Perennial; flowers 2-4 cm in diameter; intrastaminal glands connate, forming a 5-lobed ring around ovary base ..... *T. cistoides*.
1. Annual; flowers 5-15 mm in diameter; intrastaminal glands free:
  2. Flowers 5-10 mm in diameter; mericarps dorsally 2-4-spined ..... *T. terrestris*.
  2. Flowers 10-15 mm in diameter; mericarps winged on margin of dorsum ..... *T. alatus*.

In addition to the adventives, a number of species of *Tribulus* have been described from the New World as indigenous. Of these, *T. alacranensis* Millsp., from the Arrecife Alacrán, Yucatán, Mexico, and *T. sericeus* Anderss., from the Galápagos Islands, Ecuador, are synonyms of *T. cistoides*. All others prove to be members of the closely related *Kallstroemia* Scop.

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### THE FLORA OF EASTERN HIMALAYA<sup>1</sup>

This handsome volume is a report of the botanical expeditions of the University of Tokyo to the eastern Himalayas in 1960 and 1963. It is a contribution to the flora of that area of high significance, not only because of the care with which it has been prepared but also because of its broad scope and biological orientation. The volume is based on some sixty thousand specimens representing about three

<sup>1</sup>The Flora of Eastern Himalaya — Results of the Botanical Expeditions to Eastern Himalaya — Organized by the University of Tokyo 1960 and 1963. Compiled by Hiroshi Hara. i-x, pp. 1-744, pl. 1-40, figs. 1-68, route maps. University of Tokyo Press. 1966. (\$32.00 from the University of Tokyo Press, 7-3-1 Hongo, Bunkyo-ku, Tokyo, Japan.)